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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,112	01/12/2007	Hiroshi Nakano	056205.57746US	7497

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EXAMINER	
PATEL, HARSHAD R	
ART UNIT	**PAPER NUMBER**
2855	

MAIL DATE	DELIVERY MODE
12/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,112	NAKANO ET AL.	
	Examiner	Art Unit	
	HARSHAD PATEL	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed 10/20/08 have been fully considered but they are not persuasive. Regarding the amendment to §112 rejection, applicant has failed to amend claims 2 and 3 where "said second resistor" still raises the antecedent basis rejection. Furthermore, the arguments that the combination does not teach the claimed invention where Matsumara does not teach that the temperature sensor measures the temperature of the pipe wall or the fluid. It is noticed that the temperature sensor is (61) named as a chip temperature sensor is nothing more than a temperature sensor for measuring the ambient temperature forth e fluid for use for error compensation in the flow measurement.

Claim Objections

1. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 is a duplicate of claim 5 as now amended.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1, it is unclear as to whether the temperature control circuit and the heating temperature control means are different or the same elements.

5. Claims 2 and 3, “said second resistor” lacks antecedent basis.

6. Claim 4, “said flow rate detecting means” lacks antecedent basis.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horie et al. (6,935,172) in view of Matsumura et al. (6,769,298) (hereinafter Horie or Matsumura). Horie teaches a thermal flowmeter of a fluid, comprising: a flow rate measuring element disposed in a fluid passage and including a heating resistor (HF) generating heat with supply of a current, a temperature compensation resistor (CF) for detecting a fluid temperature, a first temperature measuring resistor (Ru) for measuring a temperature upstream of said heating resistor, and a second temperature measuring resistor (Rd) for measuring a temperature downstream of said heating resistor, all of said resistors being formed on the same substrate; a temperature control circuit for controlling a temperature of said heating resistor, a computing unit for receiving signals corresponding to a fluid flow rate from said first and second temperature detecting resistors, performing correction depending on temperature by using said temperature sensor, and outputting the corrected result; and heating temperature control means causing a difference between the fluid temperature and the temperature of said heating resistor to be changed depending on the fluid temperature. Horie teaches a fixed resistor (7) in series with the temperature compensation resistor (Fig. 8). Horie doe not explicitly teach a casing supported to a wall of the intake pipe and a temperature sensor for measuring the temperature of the casing. Matsumura teaches a casing (13) supported to a wall surface of an intake pipe forming the fluid passage and supporting a flow rate measuring element and a temperature sensor for measuring a

temperature in said casing. It would be obvious to a person having ordinary skill in the art at the time the invention was made to use the temperature sensor of Matsumura in the device of Horie since it would help adjust and correct the temperature dependent errors in the signal processing unit. As to having different resistance temperature coefficient for the heating resistor and the temperature compensation resistor, it would be an inherent feature as to have such a difference since a hating resistor should have a different resistance coefficient since it is to be heated when the current is applied to it, where as the temperature compensation resistor is to sense the temperature. It would be within the scope of a skilled individual to determine the resistance temperature coefficient for each resistor based on the functional characteristics of the resistor. Arranging the resistors in the circuit to achieve a known result would be within the scope of a skilled individual.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HARSHAD PATEL whose telephone number is (571)272-2187. The examiner can normally be reached on Monday-Thursday (6:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harshad Patel/
Primary Examiner, Art Unit 2855
12/15/08